

CA 1.16 (299)

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

TO: Liane J. Shekter Smith, Hazardous Waste Section, Waste and Hazardous Materials Division

FROM: Molly Rippke, Surface Water Assessment Section, Water Bureau

DATE: December 13, 2005

SUBJECT: JCI Former Stanley Tools - Mixing Zone Determination Request
National Pollutant Discharge Elimination System Permit #MID099124299

Please coordinate review/translation w/ Rom or Amy. Then notify comp and EPA.
DEC 15 2005

Waste and Hazardous Materials Division

Pursuant to your request, we have reviewed the November 14, 2005, request to develop mixing zones for groundwater venting from the JCI Former Stanley Tools site to surface waters of the state. Groundwater vents to the Red Cedar River at a rate of 0.01 cubic feet per second (cfs).

The Red Cedar River in the vicinity of the venting groundwater has 95% exceedance, harmonic mean, and 90Q10 flows of 2.3, 12, and 3.8 cfs, respectively. The parameters listed in Table 1 have been reviewed using the maximum reported discharge concentration for each parameter.

Recommended concentrations to maintain surface water quality standards (WQS) are summarized in Table 1.

Table 1. Recommended limitations for groundwater venting to the Red Cedar River.

	Parameter	CAS	Worst Case Discharge Concentration (ug/L)	Acute Value (ug/L)
TIER II	Trichloroethylene	79016	4200	3500
	cis-1,2-Dichloroethylene	156592	910	nr
TIER I	Vinyl chloride	75014	110	nr
	Arsenic	7440382	161	680
	Cadmium	7440439	13	77
	Chromium, hexavalent	18540299	20	32
	Copper	7440508	103	144
	Nickel	7440020	1180	5800
	Cyanide, free	57125	10	44

nr - no reasonable potential to exceed WQS.

Please contact me at 517-335-1125, if you have any questions.

mr:dp

cc: Brenda Sayles/Venting Groundwater File, WB